

ABSTRACT OF THE DISCLOSURE

A device and a method for wavefront measurement of an optical system (7), in particular by an interferometric measurement technique. A dynamic range correction element (12, 12a) is arranged in the beam path upstream of the detector arrangement (11) and is designed such that the variation in the spatially dependent characteristic of a phase of the wavefront forming the interference pattern is kept below a prescribed limit value throughout a detection area. In addition or as an alternative, a set of several diffraction structures of different period length can be used with a shearing interferometry technique and/or a set of several pairs of a reference pinhole and a signal passage opening with different hole spacings can be used with a point diffraction interferometry technique for different sub-areas of the detection area. A remaining distortion error can be taken into account by determining a corresponding distortion transformation and applying the inverse distortion transformation.